

Title (en)

METHOD FOR GENERATION OF GENETICALLY MODIFIED T CELLS

Title (de)

VERFAHREN ZUR ERZEUGUNG VON GENETISCH MODIFIZIERTEN T-ZELLEN

Title (fr)

PROCÉDÉ DE PRODUCTION DE LYMPHOCYTES T GÉNÉTIQUEMENT MODIFIÉS

Publication

**EP 3976763 A1 20220406 (EN)**

Application

**EP 20727342 A 20200527**

Priority

- EP 19176957 A 20190528
- EP 2020064755 W 20200527

Abstract (en)

[origin: WO2020239866A1] The present invention provides a method for the generation of genetically modified T cells comprising the steps a) a sample provided comprising T cells, b) preparation of said sample by centrifugation, c) enrichment of the T cells, d) activation of the T cells using modulatory agents, e) genetic modification of the T cells by transduction with lentiviral vector particles, f) removal of said modulatory agents, thereby generating a sample of genetically modified T cells, wherein said method is performed in equal or less than 144 hours, less than 120 hours, less than 96 hours, less than 72 hours, less than 48 hours, or less than 24 hours. In one embodiment of the invention said enrichment of T cells is performed by magnetic cell separation using magnetic particles that are directly or indirectly coupled to antibodies or antigen binding fragments thereof specific for CD4 and/or CD8 wherein said magnetic particles can be removed from the cells after separation.

IPC 8 full level

**C12N 5/0783** (2010.01)

CPC (source: EP KR US)

**A61K 39/4611** (2023.05 - EP KR); **A61K 39/4631** (2023.05 - EP KR); **A61K 39/464412** (2023.05 - EP KR); **A61K 39/464424** (2023.05 - EP KR); **C07K 14/7051** (2013.01 - US); **C07K 14/70521** (2013.01 - US); **C12N 5/0636** (2013.01 - EP KR US); **C12N 15/625** (2013.01 - US); **C12N 15/86** (2013.01 - US); **A61K 2239/48** (2023.05 - EP KR); **C07K 2319/30** (2013.01 - US); **C07K 2319/33** (2013.01 - US); **C12N 2501/2307** (2013.01 - US); **C12N 2501/2315** (2013.01 - US); **C12N 2501/505** (2013.01 - EP KR US); **C12N 2501/51** (2013.01 - KR); **C12N 2501/515** (2013.01 - EP KR); **C12N 2510/00** (2013.01 - KR US); **C12N 2510/02** (2013.01 - EP); **C12N 2740/15043** (2013.01 - US); **C12N 2740/15063** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2020239866 A1 20201203**; CA 3142108 A1 20201203; CN 113966394 A 20220121; EP 3976763 A1 20220406; JP 2022534921 A 20220804; KR 20220015452 A 20220208; US 202220504 A1 20220714

DOCDB simple family (application)

**EP 2020064755 W 20200527**; CA 3142108 A 20200527; CN 202080038200 A 20200527; EP 20727342 A 20200527; JP 2021570325 A 20200527; KR 20217042877 A 20200527; US 202017612410 A 20200527